

REMARKS/ARGUMENTS

Applicant appreciates the thorough review and consideration of the subject application. The Final Office Action of June 8, 2010 has been received and its contents carefully noted. By this Amendment, claims 1, 2, 14, and 19 have been amended, claim 18 was previously canceled without prejudice or disclaimer, and claim 20 is newly added. Accordingly, claims 1-17 and 19-20 are currently pending in the application. Support for these amendments is provided in at least Figures and related text of the specification. No new matter has been added.

In view of the above amendments and the following remarks, Applicant respectfully requests reconsideration and timely withdrawal of the pending objections and rejections for the reasons discussed below.

Allowed/Allowable Claims

The Office Action indicates that claims 3 - 7 and 9 - 14 are allowed and claims 2, 8, 16 and 17 are objected to but allowable if presented in independent form.

Rejections Under 35 U.S.C. § 103

Claims 1, 15, and 19 stand rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over U.S. Patent Application No. 2003/0099216 issued to Nilsson, *et al.* ("Nilsson") in view of U.S. Patent No. 6,385,185 issued to Huang, *et al.* ("Huang") and further in view of U.S. Patent No. 5,533,067 issued to Jamal, *et al.* ("Jamal"). Applicant respectfully traverses this rejection for at least the following reasons.

Independent claims 1 and 15 are allowable as they recite a combination of features including, *inter alia*, the estimation of the second propagation channel using

coefficients $c_p(t)$, delay τ_p from the first channel estimation and a complex coefficient β_p . More specifically, the second propagation channel (DPCH) uses part of the information that was used in the estimation of the first propagation channel (CPICH), i.e., $c_p(t)$, delay τ_p , and one additional parameter, i.e., the complex coefficient β_p . Therefore, there is a significant advantage to the claimed invention as the estimation of the second propagation channel is greatly facilitated by the first channel estimation. The prior art of record fails to teach or suggest these features.

In the rejection, the Examiner admits that Nilsson fails teach or suggest these features. To alleviate the deficiency of Nilsson the rejection relies upon Huang and Jamal. Applicant respectfully submits that neither Jamal nor Huang cure the deficiencies of Nilsson for at least the reasons set forth herein.

Huang fails to teach or suggest the estimation of the second propagation channel using coefficients $c_p(t)$, delay τ_p , and a complex coefficient β_p as recited in independent claims 1 and 15.

More specifically, Huang does not arrange the use of known pilots/symbols for the purpose of performing channel estimation. Rather, the channel estimation of Huang is performed with decision feedback as known in the art and not including known information already available, e.g., common pilots being dedicated to all the mobiles and dedicated pilots. But, Huang fails to teach or suggest utilizing information that was used in the estimation of the first propagation channel (CPICH), i.e., $c_p(t)$, delay τ_p , and one additional parameter, i.e., the complex coefficient β_p to estimate the second propagation channel.

Jamal also fails to cure the deficiencies of Huang and Nilsson. Jamal is directed towards an uncorrelated-scattering wide-sense-stationary (US-WSS) multipath propagation channel model where the multipath components are characterized by the time-varying coefficients $c_p(t)$ and delay τ_p . This technique is known in the art and does not in any way anticipate or render the claimed invention

obvious. That is, there is simply no discussion of using the correlation characteristics of two channels as claimed. That is, Jamal fails to teach or suggest utilizing information that was used in the estimation of the first propagation channel (CPICH), i.e., $c_p(t)$, delay τ_p , and one additional parameter, i.e., the complex coefficient β_p to estimate the second propagation channel.

Accordingly, Applicant respectfully requests withdrawal of the 35 U.S.C. § 103(a) rejection. Since none of the other prior art of record, whether taken alone or in any combination, discloses or suggests all the features of the claimed invention, Applicant respectfully submits that independent claims 1 and 15, and all the claims that depend therefrom are allowable.

Newly Added Claim

Newly added claim 20 is directed to features of the invention, which are not disclosed or suggested in the art of record. Accordingly, Applicant respectfully submits that claim 20 is in condition for allowance.

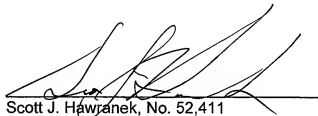
Applicant believes that a full and complete response has been made to the pending Office Action and respectfully submits that all of the stated objections and grounds for rejection have been overcome or rendered moot. Accordingly, Applicant respectfully submits that all pending claims are allowable and that the application is in condition for allowance.

Should the Examiner feel that there are any issues outstanding after consideration of this response, the Examiner is invited to contact the Applicant's undersigned representative at the number below to expedite prosecution. Prompt and favorable consideration of this Reply is respectfully requested.

Please charge deposit account 50-1123 for the Request for Continued Examination fee of \$810 which is believed due for this submittal. Any additional fees associated with this submittal may be charged to Deposit Account No. 50-1123.

Respectfully submitted,

9/7, 2010

A handwritten signature in black ink, appearing to read 'Scott J. Hawranek', is written over a horizontal line.

Scott J. Hawranek, No. 52,411
Hogan Lovells US LLP
One Tabor Center
1200 17th Street, Suite 1500
Denver, Colorado 80202
(719) 448-5920 Tel
(303) 899-7333 Fax